Dec-26

S
Insect Control
Bitterroot

Memorandum for the Files.

Insect Control work on the East Fork Project for 1926 began May 1 and ended June 12. The location of the operations was in the heads of Tolan, Mink and Springer Creeks and along the Tolan Meadow Creek Divide. The attached map will show the areas worked.

Bad weather in the form of snows and heavy rains, and the scattered distribution of trees to be treated slowed up the work in the beginning. Treatment progressed more satisfactorily when operations centered around the heads of Mink and Springer Creeks, where there were larger groups of infested trees that could be more easily reached from camps.

Approximately 30 men were engaged on the work during May, but the number was reduced on June 1 to about 15 men on account of shortage of funds. At the beginning of the job the men were divided into two camps located at the west heads of Tolan Creek at Camps 1 and 2. Infested trees in this section of the country were widely scattered. The next move was to Camps 3 and 4 at the head of Mink Creek and the north head of Tolan Creek. Here the infestations were heavier necessitating only maximum trips of a mile to a mile and a half from camps. The last camps were at Camps 5 and 6, nearly in the center of heavily infested areas. When the crews were reduced in number, Camp 5 on Springer Creek was made the center of operations.

All of the infested trees spotted in the 1925 survey had to be respotted since it was not possible for the crews to locate them conveniently otherwise. Mr. H. J. Rust of the Bureau of Entomology and two spotters handled this phase of the work. In addition to the trees respotted approximately 64% more infested trees were spotted.

The following tabulation shows the work performed:

2 copies sent Mr. Evenden

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|---|---|
| Number of trees treated | 1244 |
| Number of linear feet peeled (83%) | 37003 |
| Number of linear feet burned or charred (17%) | 7489 |
| Total number of linear feet treated | 44492 |

The average tree handled on the job was as follows:

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| Diameter breast high | 11 3/4 inches |
| Total height | 53 feet |
| Total length treated | 35.6 feet |

The effective time put on the job, not including over head, packers and cooks, was as follows:

EFFECTIVE TIME.

| | |
|---|---|
| Total man days | 541 |
| Trees treated per man day | 2.28 |
| Linear feet treated per man day | 82.24 |
| Cost per treated tree (Wages and subsistence only) | $1.61 |

During the last ten days on the operation the force was cut down to two picked six man crews. They worked close in to camp in large groups of infested trees. In the last half of the period no brush was burned on account of dry conditions. Their work on effective time was as follows:

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|---|---|
| Trees treated per man day | 2.9 |
| Linear feet treated per man day | 122 |
| Cost per treated tree (Wages and subsistence only) | $1.26 |

The resultant brush from the job was either piled and burned or the infested logs were decked and brush piled around them and burned, until the danger from the spread of fire caused suspension of all burning operations.

In the beginning the high moisture content in the logs and brush made the treatment of logs by charring slow and difficult work. Piles of logs had to be watched or returned to and brush often had to be repiled and rekindled. The disposal of brush by piling and burning proved more satisfactory. Later the widely scattered distribution of the trees or the steepness of the topography and presence of down timber made the use of a horse and the piling of logs for charring impracticable. For this reason no large percentage of trees were handled in this manner.

The last rain storm which passed through this country was on May 24 and by June 4 the humus and debris had dried out so thoroughly that it was no longer safe to burn brush, and after that date no more brush was burned on the job.

Experimental treatment of infested trees was attempted by spirally wrapping a hollow lead cable charged with TNT around the trees and exploding them with a fuse and caps. The explosions removed the bark a few inches on either side of the cable and destroyed the pupae directly underneath. When the cable was wrapped about five inches apart a strip of bark three inches wide was uninjured and when the cable was wrapped closer the earlier exploding portions of the cable would cut the unexploded portions and prevent it going off. Upon examining a number of trees that were treated with a TNT cable, it was found two weeks after the treatment that the pupae were still active and the trees were subsequently cut and peeled. The method of treating infested trees with TNT cable did not prove practicable.

The total cost of the treating operation, including equipment purchased, freight on equipment borrowed and returned, and Mr. H. J. Rust's expenses while on the job and his return to Couer d'Alene is listed below:

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|---|---|
| Wages | $2960.50 |
| Subsistence | 1329.88 |
| Supplies and Equipment | 63.50 |
| Freight, Hauling & Packing | 352.08 |
| Travel | 115.78 |
| Miscellaneous | 10.83 |
| Total Cost | $4832.57 |

The wage scale, with board, paid on the job was as follows:

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|---|---|
| Laborers | $70.00 |
| Laborers, who later went on protective force as guards and lookouts | 75.00 |
| Spotters | 80.00 |
| Foremen | $85.00-$90.00 |
| Packers | $100.00-$105.00 |
| Cooks | $100.00-$150.00 |

On the basis of the foregoing total costs, the final cost per treated tree was $3.88.

As previously stated, during the first half of the operation the work was considerably slowed down on account of the bad weather conditions and the widely scattered location of infested trees. These conditions, together with the presence of much down timber and steep slopes, made the the burning of infested logs in piles rather than peeling and burning of brush, much less feasible, and as a result the general cost of handling trees was greater than if these conditions had not prevailed.

In the event that control operations are resumed in 1927 and the work is concentrated around Springer Creek and north, it is believed that the treatment of infested trees could be handled at $3.00 each as a final cost. Without brush disposal the cost could be reduced to about $2.10 per tree. Operations south of 4B cabin and at the heads of Tolan Creek would cost approximately eight to fifteen per cent higher.

The plan of operation carried on this year could be improved upon if trees are spotted more in advance of the treating crews going in on the job and if three six man crews worked out from one camp instead of two.

December 8, 1926

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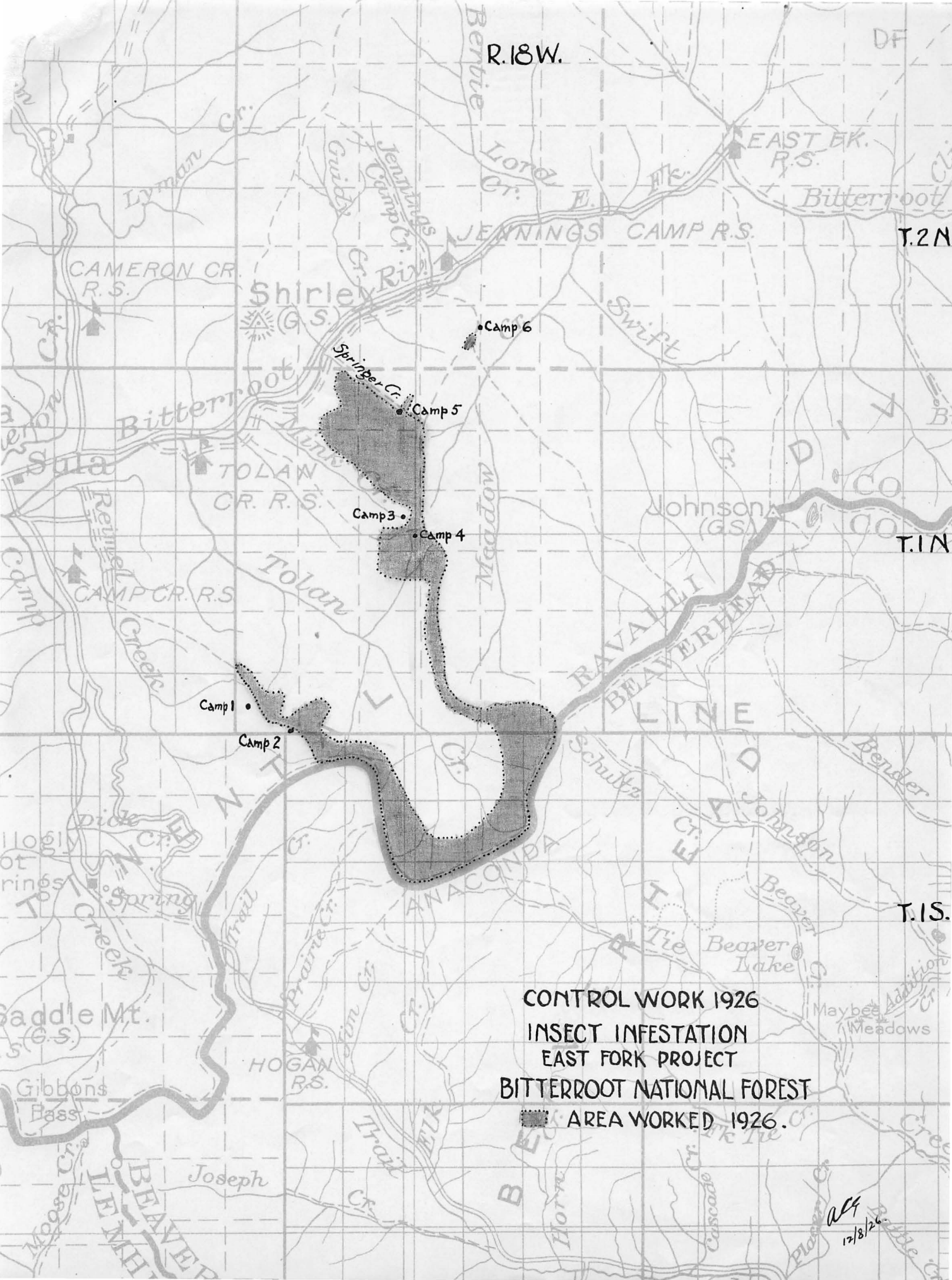
Assistant Forest Supervisor

Approved: 12/13/26
(Date)

J Ohm Thorne
Forest Supervisor.


R.18W.
T.2N
T.1N
T.1S.
Camp 1
Camp 2
Camp 3
Camp 4
Camp 5
Camp 6
Springer Cr.
CONTROL WORK 1926
INSECT INFESTATION
EAST FORK PROJECT
BITTERROOT NATIONAL FOREST
AREA WORKED 1926.
12/8/26